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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/689,289	10/11/2000	J. Scott Carr	60307	1154

23735 7590 08/27/2003

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EXAMINER
BAYAT, BRADLEY B

ART UNIT	PAPER NUMBER
3621	

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/689,289	CARR ET AL.
	Examiner	Art Unit
	Bradley Bayat	3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-21 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,9 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Status of Claims

Applicant has amended the specification in the amendment filed on 16 June 2003. Claims 1-21 remain pending and are again presented for examination on the merits.

Response to Arguments

Applicant's arguments filed on June 16, 2003 have been fully considered, but they are not persuasive.

Applicant asserts, "Gilham (U.S. Patent 4,934,846) does not disclose a fragile digital watermark" and the applicant "finds no such photocopy-related teaching in the reference (applicant's response p.5)." Embedding of hidden data into electronic content is generally known as digital watermarking. In claims 1, 8-10 and 12-14, the applicant characterizes an original watermark as being distinguishable from a photocopy, printed at the same time as the franking mark and by the same printing assembly. In the specification, the applicant further defines the watermark as being "readable only to selected classes of persons who have access to secret data, such as a private key...by using a specialized reader system, or by using a conventional reader system equipped with the private information (applicant's specification p.5, lines 16-20)." The examiner asserts that this is precisely what Gilham discloses.

Gilham's franking system discloses "the franking impression includes the portion consisting of an impression in a coded form which can be read by machine (column 3, lines 22-24)." This portion is defined by the applicant as representing a serial number code, identifier of a printer, personal computer, postage vault or other device used in printing postage (applicant's specification p.5, lines 3-11). Likewise, Gilham teaches that such coded data can include

postage date, value, franking machine identification license number and particularly a pseudo-random number "in order to secure from attempts to fraudulently print or tamper with that data (column 3, line 54 – column 4, line 2)." Gilham further teaches that the aforementioned data block is then encrypted using a secure encryption key and is unique to each transaction (column 4, lines 2-4, lines 16-17).

The applicant further describes an attribute of the watermark as being able to identify the particular software employed by the user in order to prevent fraudulent copying or tampering (applicant's specification p.5, lines 8-10). Gilham's franking machine includes electronic circuits operable to control operation of the print head and to receive output signals from the reading device (figure 4 and associated text). These circuits are operable under the control of software programs to generate pseudo-random numbers in sequence and to form a data block (column 4, lines 24-26). Thus, the output of the reading device is compared with the data block intended to be printed (column 4, lines 38-39). If the comparison indicates that the printing does not correctly represent the data block, printing of the remainder of the franking impression is terminated and a fault message displayed (column 4, lines 46-50). Thus, Gilham's franking system utilizes plural bits of digital data printed at the same time of the franking mark and by the same printing assembly, permitting a photocopy to be distinguished from the original.

The applicant further argues that the rejection combining Gilham and Bloom (U.S. Patent 6,332,194 B1) is deficient, because Bloom does not appear to contain any teaching or suggestion concerning postage (applicant response p.6). Applicant's argument is invalid. Bloom need not contain a specific reference to postage or a franking system to be applicable. There must only be some suggestion or motivation, either in the reference or in the knowledge generally available to

one of ordinary skill in the art, to modify the reference or to combine reference teachings. Bloom discloses a method for data preparation and watermark insertion (see abstract). Applicant's claims rejected under Bloom describe various methods of watermark formation and insertion wherein the watermark serves to prohibit copy reproduction. Bloom teaches various uses of a watermark, namely, for copy generation management (column 1, lines 10-17). One such application, according to Bloom, is a "copy never" state, intended to prohibit any copying, as applicant has claimed (column 1, lines 18-25). Bloom further teaches various ways of copy management, including the use of more than one watermark to prevent reproduction of original content (column 1, lines 25-54), as claimed by applicant. Therefore, the examiner maintains that one of ordinary skill in the art would recognize the benefit of utilizing watermarks for permitting a photocopy to be distinguished from the original, for copy generation management.

The applicant further argues that neither Moskowitz et al. (U.S. 5,822,432) nor Daigneault et al. (U.S. Patent 6,334,678) "appear to contain any teaching or suggestion concerning postage (applicant's response p.6)." The applicant relies on the same invalid reasoning for arguing against Bloom. The examiner asserts that for the above reasons and incorporating the arguments set out in Office Action mailed on March 14, 2003, the rejection is maintained and made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 8-10 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Gilham, U.S. Patent 4,934,846.

As per claims 1, 8-10 and 12-14, Gilham discloses a method of franking mail items (encoding envelopes) with bits of data that are machine-readable and distinguishable from a photocopy and printed on an envelope with the franking mark (see column 1, line 46 – column 2, line 60; column 3, lines 5-27). Gilham discloses the printing mechanism of the franking machine directly onto the envelope as well as various methods of printing the franking impression (see column 3, line 7 – column 5, line 65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-4, 6, 7, 15-17, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloom et al., U.S. Patent 6,332,194 B1.

As per claims 2-4, 6, 7, 15-17, 19 and 21, Gilham discloses a franking system wherein data is embedded on mail items, readable by an optical scanner and the original distinguishable from a photocopy (see abstract). Gilham does not explicitly teach the use of various forms of watermarking techniques. Bloom et al. teaches a method for data preparation and formation of various watermarks for insertion into a medium with copy protection (see column 5, lines 9-11; column 4, lines 6-45; column 7, line 10-53). Bloom et al. is evidence that one of ordinary skill in the art would recognize the benefit of utilizing various watermarking techniques and multiple

watermarks to accomplish several verification or authentication tasks. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention to utilize such techniques to accomplish the above stated purpose, as per teachings of Bloom et al.

Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moskowitz et al., U.S. Patent 5,822,432.

As per claims 5 and 18, Gilham discloses a franking system wherein data is embedded on mail items, readable by an optical scanner and the original distinguishable from a photocopy (see abstract). Gilham does not explicitly teach the use of encoded data to link to a website. Moskowitz et al. teaches a method of encoding digital watermarks to contain a URL, an Internet Protocol Address or an Internet domain name (see column 13, line30 - column 14, line 6). Moskowitz et al. is evidence that one of ordinary skill in the art would recognize the benefit of utilizing watermarks to directly link to databases, i.e., an internet website. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention to utilize such techniques to accomplish the above stated purpose, as per teachings of Moskowitz et al.

Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daigneault et al., U.S. Patent 6,334,678 B1.

As per claims 11 and 20, Gilham discloses a franking system wherein data is embedded on mail items, readable by an optical scanner and the original distinguishable from a photocopy (see abstract). Gilham does not explicitly teach the method of applying a second watermark on the opposite side of a substrate where a first watermark was formed. Daigneault et al. teaches a

method for applying chemical watermarks on substrate (see column 2, line 13 – column 4, line 13). Daigneault et al. is evidence that one of ordinary skill in the art would recognize the benefit of applying multiple watermarks on a substrate. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention to utilize such techniques to accomplish the above stated purpose, as per teachings of Daigneault et al.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Patent No. 6,064,764 to Bhaskaran et al., Fragile Watermarks for Detecting Tampering in Images.
- Patent No. 6,205,373 B1 to Hart et al., Method and System for Tracking Manually Repaired Mail pieces or the Like.

- Patent No. 6,330,672 B1 to Shur, Method and Apparatus for Watermarking Digital Bit streams.
- Frost article disclosing the use of watermarks for authenticating media.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley Bayat whose telephone number is 703-305-8548. The examiner can normally be reached Tuesday – Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 703-305-9768.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-6128 for regular **UNOFFICIAL FAX** communications and 703-305-7687 for **OFFICAL** formal communications intended for entry including After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5484.

bbb
August 20, 2003

JAMES P. TRAMMELL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600